ABSTRACT OF THE DISCLOSURE

A wavelength-division multiplexer (WDM) or demultiplexer (WDDM) using expanded-core fibers is disclosed. According to one aspect, a WDM or WDDM includes wavelength-division multiplexer or demultiplexer operable to communicate optical signals using a first and second optical fiber having end portions with expanded cores. The end portion of the second optical fiber is optically coupled to the end portion of the first optical fiber and positioned at a distance operable to maintain a fill factor for a wavelength associated with the optical signals.

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1000 EAGLE GATE TOWER 60 EAST SOUTH TEMPLE SALT LAKE CITY, UTAH 84111